



Litter on beach and coast: EU policy responses

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A *serious* problem

Impacts

- **Environmental:** ingestion by and entanglement of biota, habitats degradation, vehicle for chemical pollution and invasive species, microplastics
- **Social :** impairment of aesthetic and cultural value, health impacts
- **Economic :** Beach Clean-Up: €200-600m p.a. Damaged fishing gear: €60m. Ghost fishing: Wasted fish



A *shared* problem

- *International*

- *Regional*

- *“Domestic”*

(European/National/Sub-National)



Plastic bags Directive

- c.100bn single-use plastic bags p.a. (c.200 per person)
- 8 billion bags as litter
- Reductions of up to 80% possible
- EU implements measures to reduce their use



Marine Strategy Framework Directive

- The EU legal instrument specifically addressing litter in the marine and coastal environment
- EU MS must ensure that by 2020 "Properties and quantities of marine litter do not cause harm to the coastal and marine environment."
- Programmes of Measures to achieve this were due on 31 March 2016
- Indicators:
 - Trends in amount/composition/spatial distribution and, if possible, source of litter on beaches/water column/seafloor
 - Trends in amount/distribution and, where possible, composition of microparticles, in particular microplastics
 - Trends in amount and composition of litter ingested by marine animals

Riverine litter

- A vast majority of the litter items and quantities occurring on land, particularly light weight, will ultimately end up in inland waters and the seas
- Rivers are important vectors of land-based litter to the seas,
- practically any region with large rivers in Europe contribute to marine pollution.
- For example, annually, the Rhine is estimated to transport 20 to 30 tonnes of plastic litter to the North Sea, Danube around 500 tonnes to the Black Sea, together with microplastic particles in the order of billions.
- This is, inter alia, the result of inadequate waste and waste water management, including storm water overflows



Riverine litter

- Litter receives increasing attention in the context of the Water Framework Directive : Member States must report on the presence of litter, if they are taking measures to address it
- New studies are in preparation in cooperation with JRC, addressing technical aspects of riverine litter monitoring, aiming at harmonised and regular monitoring, development of modelling tools (considering riverflow, meteorological, population and other socioeconomic data) and towards an EU floating litter observation network

Sea-based sources

- Most, but not all litter comes from land; impact of litter on marine life and biodiversity depends on quantities, but also composition and number of litter items.
- Up to 12 000 tonnes of fishing waste and 41 000 of aquaculture waste is finding its way to European seas annually. Market-based instruments and removing disincentives for bringing waste ashore, could substantially contribute to reducing dumping at sea.
- The review of the Port reception facilities Directive will contribute to further reduction of litter from sea-based sources but much remains to be done.
- Awareness raising and behavioural changes need to include sea-based stakeholders.

Stakeholders' responsibilities

- The longer litter stays on the beach, before finally entering the marine environment, the more dangerous it can become; plastics, through weathering accelerated by sunlight and mechanical friction fragment down to microplastics.
- Beach litter surveys confirm the prevalence of certain materials such as plastic or items, such as single use products, including packaging. For other frequent items, such as cigarette butts, the pathways are short and the target groups easy to identify.
- Careful selection of items to target is important for triggering producer responsibility in terms of material choice and design and of behavioural change of users and consumers
- Even if we improve drastically waste management and other marine litter prevention measures, millions of plastic will still be entering our seas. We need to develop products and materials which will be intrinsically less harmful to aquatic environment

Next steps

- Closer definition of marine litter baselines in the EU marine regions
- Creating/exploiting synergies with existing/future regional plans against marine litter
- Filling knowledge gaps on sources, composition and pathways and impacts, for facilitating design of measures and monitoring of their effectiveness
- Elaborating options for tackling also other sources (e.g. wastewater effluents, aquaculture, storm overflows) or forms (e.g. microplastics) of marine litter
- Implementation of the mandate of the Circular Economy Package taking into account the 30%/2020 reduction target and the opportunities of the Strategy on Plastics



Marine litter stands for wasted material, threat to biodiversity and to human health : its organic link with the resource efficiency agenda needs to be better understood and communicated



Thank you for your attention!